



Golden Eagle. Adult (12-XI).

GOLDEN EAGLE

(Aquila chrysaetos)

IDENTIFICATION

76-89 cm. **Adult** with dark brown plumage; golden colour on head and nape; tail with transversal bands. **Juveniles** with white base on primaries and secondaries; white tail with dark terminal band.



Golden Eagle. Adult. Pattern of head and tail.

SIMILAR SPECIES

This species is unmistakable.

SEXING

In **adult** birds, size is an useful characteristic for extreme birds: **male** with wing shorter than 595 mm; **female** with wing longer than 630 mm.

AGEING

6 age groups can be recognized (**CAUTION**: there are individual factors (different metabolism, food availability, date of birth, e.g.) causing that moult in a so big birds no always fit exactly the annual cycle described here):

Juvenile with fresh flight feathers of a single generation; brown lesser coverts; inner primaries and secondaries narrow and pointed; from below, base of primaries and secondaries white with blackish distal part (**CAUTION:** no all specimens show this characteristic); tail always white without greyish mottling and with a dark terminal band; underparts and underwing coverts dark brown; dark brown iris.

2nd year autumn/3rd year spring with a mix of worn retained juvenile and fresh moulted lesser and median converts; most or all the greater coverts worn and bleached; three to five inner primaries moulted; none to three secondaries moulted, broad and rounded, contrasting with the worn and pointed juvenile retained; usually moulted the central pair of tail feathers, the new feathers still with juvenile appearance; juvenile underparts with some fresh buff feather; dark brown iris.

3rd year autumn/4th year spring with **juvenile** lesser and median coverts almost all replaced by darker feathers; greater coverts with admixed fresh and old feathers related with changed or retained secondaries; only outermost primaries still **juvenile**; secondaries with three ages, the fresh feathers with greyish base and dark tip; underparts paler on breast; lesser and median underwing coverts buff contrasting with darker greater underwing coverts; most of tail feathers have been moulted but the new ones have **juvenile** pattern, pale with terminal dark band; iris brown, paler than the pupil.

4th year autumn/5th year spring with worn lesser and median coverts; fresh central greater coverts; some very worn **juvenile** median secondaries and outer primaries may be retained but sometimes all **juvenile** feathers are moulted; tail with juvenile pattern, whitish with dark terminal band, although some 3rd generation feather may show **adult**-type barred.

5th year autumn/6th year spring with fresh lesser and median coverts; worn central greater coverts; flight feathers with three generations or four in birds with all secondaries moulted without **juvenile** feathers; if white patches on underwing then confined to base of some primaries and secondaries, generally barred; black and white tail feathers, with dark barred in terminal band.



Adult with flight feathers with broad subterminal band and grey barred; greater and primary coverts with grey base and dark tip; without white patches on underwing and tail; amber or pale brown iris. CAU-TION: some adults have white patches on underwing and tail during several moults.



Golden Eagle. Ageing. Colour of iris: top adult; bottom juvenile.





Golden Eagle. Ageing. Pattern of primaries: top adult; bottom juvenile.





G o I d e n E a g I e . A g e i n g . Pattern of tail feathers: left adult; right juvenile.



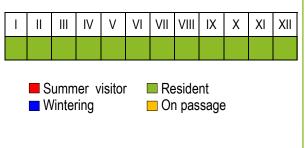
Golden Eagle. Ageing. Pattern of tops of secondaries: top adult; bottom juvenile.



MOULT

Complete **postbreeding** moult, usually spending two years in change all body and flight feathers; moult period is between March and October. **Postjuvenile** moult lasts four to five years until all flight feathers are changed; part of body feathers, three to four inner primaries, none to 3 secondaries, some tertials and 2 or 3 tail feathers are moulted in **2nd year**; half of secondaries, tail feathers and median primaries are moulted in **3rd year**; outermost primaries and rest of secondaries are moulted in **4th year**, although outermost primary and some median secondaries may be retained; moult period is between April and November.

PHENOLOGY





Golden Eagle. 4th year autumn (28-XII).

PICTURE NOT AVAILABLE

Golden Eagle. 5th year autumn ().

PICTURE NOT AVAILABLE

Golden Eagle. 3rd year autumn ().



Golden Eagle. 5th year autumn: head pattern and iris colour ().

PICTURE NOT AVAILABLE

Golden Eagle. 2nd year autumn ().



Golden Eagle. Juvenile (14-II).



G o I d e n E a g I e . Adult: head pattern and iris colour (12-XI).



PICTURE NOT AVAILABLE

Golden Eagle. 4th year a u t u m n : head pattern and iris colour (28-XII).



Golden Eagle. 3rd year a u t u m n : head pattern and iris colour ().

PICTURE NOT AVAILABLE

Golden Eagle. 2nd year a u t u m n : head pattern and iris colour ().



Golden Eagle. Juvenile: head pattern and iris colour (14-II).



PICTURE NOT AVAILABLE

Golden Eagle. Breast pattern: left adult (12-XI); right 5th year autumn ().





PICTURE NOT AVAILABLE

Golden Eagle. Breast pattern: left 4th year autumn (28-XII); right 3rd year autumn ().



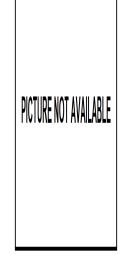
Golden Eagle. Breast pattern: left 2nd year autumn (); right juvenile (14-II).



PICTURE NOT AVAILABLE

Golden Eagle. Upperpart pattern: left adult (12-XI); right 5th year autumn ().





Golden Eagle. Upperpart pattern: left 4th year autumn (28-XII); right 3rd year autumn ().

PICTURE NOT AVAILABLE



Golden Eagle. Upperpart pattern: left 2nd year autumn (); right juvenile (14-II).





Golden Eagle. Adult. Male: tail pattern with white patches (09-II).



Golden Eagle. 4th year autumn: tail pattern (1 a d u l t feather, 2 subadult feather) (28-XII).



Golden Eagle. Adult. Female: tail pattern (12-XI).

PICTURE NOT AVAILABLE

Golden Eagle. 3rd year autumn: tail pattern ().

PICTURE NOT AVAILABLE

Golden Eagle. 5th year autumn: tail pattern ().



Golden Eagle. 2nd year autumn: tail pattern (1 juvenile feather, 2 2nd year feather)





Golden Eagle. Juvenile: tail pattern (14-II).



Golden Eagle. 4th year autumn: pattern of prim a r y coverts (28-XII).



Golden Eagle. Adult. Male: pattern of primary coverts (09-II).



Golden Eagle. 3rd year autumn: pattern of prim a r y coverts ().



Golden Eagle. Adult. Female: pattern of prim a r y coverts (12-XI).



Golden Eagle. 2nd year autumn: pattern of prim a r y coverts (23-XII).



Golden Eagle. 5th year autumn: pattern of prim a r y coverts ().



Golden Eagle. Juvenile: pattern of primary coverts (14-II).







Golden Eagle. Adult. Male: pattern of wing coverts (09-II).

Golden Eagle. Adult.

Female:

pattern

of wing

coverts

(12-XI).



Golden Eagle. 2nd year autumn: pattern of wing coverts (23-XII).



Golden Eagle. Juvenile: pattern of wing coverts (14-II).





Golden Eagle. 4th year autumn: pattern of prim a r y coverts (28-XII).



Golden Eagle. 3rd year autumn: pattern of wing coverts ().



Golden Eagle. Adult: pattern of underwing coverts (07-XII).

PICTURE NOT AVAILABLE

Golden Eagle. 5th year autumn: pattern of underwing coverts ().





Golden Eagle. 4th year autumn: pattern of underwing coverts (28-XII).

PICTURE NOT AVAILABLE

Golden Eagle. 3rd year autumn: pattern of underwing coverts ().



Golden Eagle. 2nd year autumn: pattern of underwing coverts (23-XII).



Golden Eagle. Juvenile: pattern of underwing coverts (14-II).

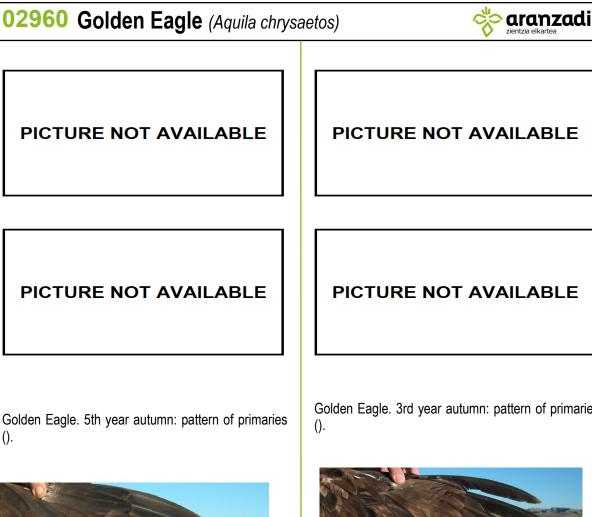


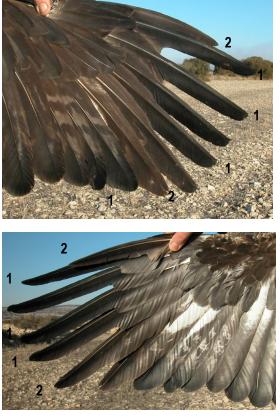


Golden Eagle. Adult. Male: pattern of primaries (09-



Golden Eagle. Adult. Female: pattern of primaries (12-XI).





Golden Eagle. 4th year autumn: pattern of primaries (1 adult feather, 2 subadult feather) (28-XII).

Golden Eagle. 3rd year autumn: pattern of primaries





Golden Eagle. 2nd year autumn: pattern of primaries (1 juvenile feather; 2 2nd year feather) (23-XII).







Golden Eagle. Juvenile: pattern of primaries with large white patch (14-II).



Golden Eagle. Juvenile: pattern of primaries with small white patch (14-II).





Golden Eagle. Adult. Male: pattern of secondaries 09 -II).



Golden Eagle. Adult. Female: pattern of secondaries (12-XI).



PICTURE NOT AVAILABLE

PICTURE NOT AVAILABLE

PICTURE NOT AVAILABLE

Golden Eagle. 5th year autumn: pattern of secondaries ().





Golden Eagle. 4th year autumn: pattern of secondaries (1 juvenile feather, 2 postjuvenile feather) (28-XII).

Golden Eagle. 3rd year autumn: pattern of secondaries ().

PICTURE NOT AVAILABLE



Golden Eagle. 2nd year autumn: pattern of secondaries (23-XII).







Golden Eagle. Juvenile: pattern of secondaries (14-II).





Golden Eagle. Adult. Female: pattern of wing (12-XI).





Golden Eagle. Adult. Male: pattern of wing (09-II).

PICTURE NOT AVAILABLE

PICTURE NOT AVAILABLE

Golden Eagle. 5th year autumn: pattern of wing ().







Golden Eagle. 4th year autumn: pattern of wing (1 juvenile feather, 2 subadult feather; 3 adult feather) (28-XII).



PICTURE NOT AVAILABLE

Golden Eagle. 3rd year autumn: pattern of wing ().



Golden Eagle. 2nd year autumn: pattern of wing (23 -XII).





Golden Eagle. Juvenile: pattern of wing with large white patch (14-II).



Golden Eagle. Juvenile: pattern of wing with small white patch (14-II).